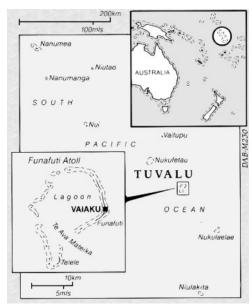
#### TUVALU

Prepared by NEPMU6 Jul 03 Reviewed and revised by NEPMU6 Threat Assessment Department May 05



Per USCINCPACINST 6200.2: Commanders are responsible for an effective Force Health Protection Plan for personnel deploying to locations within the USCP AOR, ensuring implementation of the Plan, for appointing a FHP Officer and assistant who will serve



as the Commander's focal point for the planning, coordination, and execution of "real world" force health protection planning for a specific deployment. This is applicable to all assigned and attached personnel, all Department of Defense personnel performing official duties within locations in the AOR, and all U.S. contractor personnel employed directly by the DOD in locations in the AOR.

Note: This Force Health Protection (FHP) document provides general and country-specific guidance for developing a FHP deployment plan. Specific requirements may vary depending on the deployment activities and conditions. Any operation or exercise-specific guidelines supersede this.

# FHP Planning must include the following elements:

1. Health Threat Assessment: This assessment must evaluate known and anticipated health threats/hazards (including endemic diseases, injuries, industrial toxins, and climatic extremes) and the appropriate countermeasures to be taken for each.

Health-care facilities: Medical care is substandard throughout the country including in Funafuti. Adequate medical evacuation coverage is a high priority. In the event of serious medical conditions every effort should be made to go to Guam or Honolulu, Hawaii.

Food-borne and water-borne illness: Sanitation varies with location, but typically is below US standards. Local food and water sources (including ice) may be contaminated with pathogenic bacteria, parasites, and viruses to which most US service members have little or no natural immunity. Food- and waterborne illnesses can occur including diarrhea illnesses, typhoid fever, hepatitis A, and helminthes infections. Ciguatera poisoning is prevalent and results from eating reef fish such as grouper, snapper, amberjack, and barracuda. The toxin remains even when fish is well cooked.

Insect/arthropod-borne illness: Dengue fever occurs throughout
the islands.

Other illnesses: Influenza risk extends throughout the year.

- 2. Health Record and Readiness Screening: Performed prior to deployment. Items identified for screening include: immunizations, HIV testing, TB skin testing, DNA sample on file, current physical exam, dental class I or II, prescription medications on hand, extra pair of eye glasses, and unresolved health problems (i.e., limited duty, pregnancy, mental health, etc.) which could disqualify the service member for deployment.
- 3. Updated immunization record: Service members should have a copy of the updated immunization record. PHS 731 or DD 2766C is acceptable.
- 4. Pre-deployment health assessment: All personnel deploying as a result of a JCS/Unified Command Deployment Order for 30 continuous days or greater to a land-based location outside the United States that does not have a permanent US military medical treatment facility must complete a pre-deployment health assessment questionnaire (available at the web site of the Army Medical Surveillance Activity (AMSA) www.amsa.army.mil). A copy should be sent to AMSA, and the original placed in the member's medical record. Post-deployment health assessments must be completed upon return. Tuvalu does NOT have permanent US military medical treatment facilities.
- **5. Health Threat Briefing:** Must be performed prior to deployment. Attendance must be documented. Minimum contents of a Health Threat Briefing for Tuvalu are included in sections 5.1 5.11.

## 5.1 Immunizations:

- (a) Routine immunizations: All routine immunizations must be up to date for personnel on deployable or mobility status: tetanus booster, hepatitis A, hepatitis B (health care providers or others potentially occupationally exposed), typhoid, MMR, polio, influenza.
  - (b) Current influenza vaccine.
  - (c) Special immunizations: None.
- (d) Yellow Fever vaccination certificate is required if coming from a yellow fever infected area.
- (e) Rabies: Considered rabies-free; no pre-exposure vaccine is required.
- 5.2 Malaria Chemoprophylaxis: None there is no malaria.
- **5.3 Tuberculosis:** Tuberculosis exists throughout the country. Pre-deployment PPD should be consistent with service requirements. Follow-up PPD should be considered 3 months post-deployment consistent with service specific guidelines.

- **5.4** Personal Protective Measures: The most important personal protective measures against insect-borne diseases (e.g., dengue/DHF) are avoiding vector exposure as much as possible, using appropriate arthropod repellent, properly wearing permethrin-treated field uniforms, and sleeping under a treated, properly installed bed net if outdoors or in an open shelter.
- (a) Avoid vector exposure: Aedes mosquitoes, which transmit dengue, are primarily daytime feeders, both urban and rural dwellers.
- (b) 33% extended-duration DEET (NSN 6840-01-284-3982) or an equivalent should be applied to all exposed skin surfaces 30 minutes before potential exposure and should be reapplied every four to six hours, especially if there is significant sweating. When using both DEET and sunscreen, DEET should be applied approximately 30 minutes before the sunscreen. DEET decreases the effectiveness of the sunscreen by approximately 35%, therefore, sunscreen with SPF 30 is recommended. Sunscreen should not be applied first since that may decrease the effectiveness of the DEET
- (c) Permethrin treatment of uniforms and bed nets before departure (preferably with permethrin concentrate/compressed air sprayer technique, which lasts the life of the uniform).
- (d) Sleep under a permethrin-treated bed net with the edges tucked in under the bedding on all sides if not staying in closed, air-conditioned quarters. Net should be suspended from poles (poles on <u>outside</u> of net to prevent gapping) so net does not come in contact with occupant.

## 5.5 Safe Food and Water:

- (a) Wash hands before eating, smoking, or handling food and after using latrines
- (b) CONSUME ONLY APPROVED FOOD AND WATER If not available:
- (c) Eat piping hot, freshly cooked food from reputable sources
- (d) Eat no salads or fresh fruit/vegetables (except intact fruit which you wash and open yourself
  - (e) Eat no food from street vendors or stalls
- (f) Drink bottled or canned water/beverages only without ice cubes.
- **5.6** Sexually transmitted diseases: STDs are found in every area in the world and can be serious or fatal (e.g., HIV, gonorrhea, hepatitis B).
- (a) Abstinence is the only perfectly safe practice and is recommended.
- (b) Barrier protection with latex condoms is the only other acceptable option (but can be just as dangerous in case of breakage).

# 5.7 Motor Vehicle and General Safety.

- (a) Motor vehicle accidents pose a great health risk for travelers. Seat belt use and extreme caution in and around vehicles must be practiced. Traffic moves on the left. Roads are mostly unpayed. Drive at speeds appropriate for road conditions.
- (b) General safety. Exercise caution in ALL activities to avoid injury of any type. If you are seriously injured, there may be no option other than medical care in a facility where sterility of equipment and safety of blood products are below those in the U.S.

### 5.8 Environmental Factors

- (a) Climate. The climate is tropical with high humidity. Daytime temperatures range from 80 to 85øF.
- (b) Heat injury. The hot, humid climate makes heat exhaustion and heat stroke more likely. Factors that increase heat injury risk include: alcohol consumption, skin trauma, diarrhea, certain medications and poor conditioning. Necessary precautions include drinking water and other fluids frequently, on a schedule, to avoid dehydration; adhering to safe work-rest cycles during extreme conditions; and careful observation of teammates to detect warning signs of heat injury such as mental status changes and cessation of sweating.
- (c) Sun injury. Sun exposure can be intense. Sunglasses, wide-brimmed hats, long sleeves and trousers, and liberal use of sunscreen (SPF 30 or greater) and lip balm are recommended precautions. Sunscreen should be applied to all sun-exposed skin approximately 30 minutes after applying DEET.
- (d) Environmental and industrial pollution: Not a significant problem in Tuvalu, although there are 10 large holes (borrow pits) on the largest islet, some as big as 300 feet long and 50 feet wide, that were dug to provide material to build a runway during WWII. For years, people have dumped garbage into the borrow pits—everything from beer cans and pig waste to old car bodies and rusting cargo containers, resulting in a combination of garbage and fetid water. Reportedly, the south tip of the largest islet is now a "massive garbage dump", which occasionally burns, sending out smoke plumes that are visible for miles and could cause symptoms in those with underlying respiratory disorders. Drinking water is considered contaminated.

### 5.9 Hazardous Plants and Animals:

- (a) Animal Bites: Tuvalu is rabies free. However, animal bites of any type should be thoroughly cleansed with soap and water and evaluated by a competent healthcare provider.
  - (b) Snakes: There are no venomous snakes in Tuvalu.
- (c) Dangerous Marine Life: Venomous marine life residing in the waters around Tuvalu include: Stone fish, Lion fish, stinging jelly fish, and sea snakes. Their sting may be potentially life-threatening. Anti-venom exists but may be difficult to locate expediently. Ciguatera poisoning is present and results from eating reef fish such as grouper, snapper,

amberjack, and barracuda. The toxin remains even when fish is well cooked.

**5.10 Personal Health and Fitness**. Try as much as possible to maintain a healthful regimen of hygiene and fitness. Regular bathing and frequent changes of undergarments, including socks, are important. When exercising outdoors, be aware that shorts and tank tops will make you more susceptible to diseases carried by mosquitoes and other insects. Apply DEET repellent to exposed skin prior to exercising outdoors.

### 5.11 Other comments.

- (a) Tuvalu comprises nine islands in the central Pacific Ocean, just south of the Equator, about 2,500 miles northeast of Australia. It is a self-governing member of the British Commonwealth with an economy based on agriculture, a coconut product called copra, tourism and fishing. Postage stamps, prized by collectors, are a major export.
- (b) For more information, obtain the latest State Department advisory and Consular Information Sheet prior to travel at: http://travel.state.gov/tuvalu.html
- (c) There is no US embassy in Tuvalu. Assistance is provided by the <u>U.S. embassy</u> in Fiji located at 31 Loftus Street, Suva. Internet: www.amembassy-fiji.gov. Tel: 679-331-4466. Fax: 679-330-0081. The mailing address is U.S. embassy, P.O. Box 218, Suva, Fiji.
- (d) Further information may be obtained in the DOD Foreign Clearance Guide found at: http://www.fcg.pentagon.mil/
- (e) For assistance with patient movement contact the Pacific Theater Patient Movements Requirements Center at DSN 315-225-4700. Or for emergency medical assistance contact the International SOS Singapore at (IDD) 656 338-9277.
- **6. Assistance** with Health Threat Assessments, Health Threat Briefings, and countermeasures planning can be obtained from the following sources:
- **6.1.** Threat Assessment Department, Navy Environmental and Preventive Medicine Unit 6, phone (DSN or 808) 473-0555; email: <a href="mailto:threatassessment@nepmu6.med.navy.mil">threatassessment@nepmu6.med.navy.mil</a>.
- 6.2. Health Promotion and Preventive Medicine Department, Tripler Army Medical Center, phone (DSN or 808-433-6693)
- **6.3.** Pacific Air Forces Public Health Officer, Hickam Air Force Base, phone (DSN or 808) 448-3427; email: Paul.Rehme@hickam.af.mil.